PERSONAL INFORMATION

Name and surname	Vladimir Simic
Date and place of birth	18.08.1991. Kragujevac
Scientific title	Research assistant
E-mail	vsimic@kg.ac.rs
Educational-scientific / educational-artistic field	Technical and technological sciences
University, Faculty, Organizational unit	University of Kragujevac, Institute for Information technologies, Department of technical and technological sciences
Research field and areas	Mechanical engineering, Applied mechanics

EDUCATION

BACHELOR

Year	2011-2014
Place	Kragujevac
Institution	Faculty of Engineering, University of Kragujevac

MASTER STUDIES

Year	2014-2016
Place	Kragujevac
Institution	Faculty of Engineering, University of Kragujevac

DOCTORAL DISSERTATION

Year	2016-
Place	Kragujevac
Institution	Faculty of Engineering, University of Kragujevac
Title of doctoral dissertation	Analysis and application of smeared methodology in modelling of transport within deformable biological systems
Scientific title	Research assistant

Research area	Mechanical engineering, Applied mechanics

PROFESSIONAL BIOGRAPHY – ELECTION IN RESEARCH OR SCIENTIFIC TITLE

Date	Institution	Scientific title
22. 06. 2017.	Faculty of Engineering, University of Kragujevac	Junior researcher
19.03.2020.	Faculty of Engineering, University of Kragujevac	Research assistant

PROFESSIONAL BIOGRAPHY - TRAINING

Year	Institution	Duration

ENGAGEMENT IN THE FORMATION OF SCIENTIFIC PERSONNEL

PARTICIPATION IN NATIONAL PROJECTS FINANCED BY MINISTRY OF EDUCATION/MINISTRY OF SCIENCE AND TECHNOLOGICAL DEVELOPMENT/SCIENCE FUND OF THE REPUBLIC OF SERBIA:

Project III41007 Interdisciplinary project for application of biomedical engineering in pre-clinical and clinical studies. Ministry of Education, Science and Technological development.

PARTICIPATION IN INTERNATIONAL PROJECTS

SILICOFCM, (In Silico trials for drug tracing the effects of sarcomeric protein mutations leading to familial cardiomyopathy), FP7-ICT-2011-9-600933, Project Coordinator: dr Nenad Filipovic, Faculty of Mechanical Engineering, University of Kragujevac, Serbia, 01.06.2018 – 01.06.2022.

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL ASSOCIATIONS

ORGANIZATION OF NATIONAL/INTERNATIONAL SCIENTIFIC MEETINGS (CONFERENCES, CONGRESSES...)

Member of local organizational committee of 1st International Conference on Chemo and BioInformatics, Kragujevac, Serbia.

LIST OF SCIENTIFIC PAPERS:

Monographs, Monographic studies, Thematic anthologies	**Sum 4**
1. **Vladimir Simic**, Miljan Milosevic, Arturas Ziemys, Milos Kojic, Application of CSFE for drug delivery in liver model with tumor, Computational Bioengineering and Bioinformatics, ICCB 2019, ISBN: 978-3-030-43657-5, Learning and Analytics in Intelligent Systems, vol. 11, Springer Cham, doi.org/10.1007/978-3-030-43658-2_5, pp 44-52, 2020. 2. Milos Kojic, Miljan Milosevic, Bogdan Milićević, **Vladimir Simic**, Heart mechanical model based on Holzapfel experiments, Computational Bioengineering and Bioinformatics, ICCB 2019, ISBN: 978-3-030-43657-5, Learning and Analytics in Intelligent Systems, vol. 11, Springer Cham, doi.org/10.1007/978-3-030-43658-2_2, pp 12-21, 2020. 3. Milos Kojic, Miljan Milosevic, **Vladimir Simic**, Vladimir Geroski, Bogdan Milićević, Arturas Ziemys et al, Finite Element Models with Smeared Fields Within Tissue – A Review of the Current Developments, Computational Bioengineering and Bioinformatics, ICCB 2019, ISBN: 978-3-030-43657-5, Learning and Analytics in Intelligent Systems, vol. 11, Springer Cham, doi.org/10.1007/978-3-030-43658-2_3, pp 22-34, 2020. 4. Vladimir Geroski, Miljan Milosevic, **Vladimir Simic**, Bogdan	

Milićević, Nenad Filipovic, Milos Kojic, Composite Smeared Finite Element – Application to Electrical Field, Computational Bioengineering and Bioinformatics, ICCB 2019, ISBN: 978-3-030-43657-5, Learning and Analytics in Intelligent Systems, vol. 11, Springer Cham, doi.org/10.1007/978-3-030-43658-2_4, pp 35-43, 2020.

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1. Kojic M, Milosevic Miljan, **Simic Vladimir DR**, Koay E.J, Fleming J.B, Nizzero S, Kojic Nikola, Ziemys Arturas, Ferrari Mauro, A composite smeared finite element for mass transport in capillary systems and biological tissue. Computer Methods in Applied Mechanics and Engineering, ISSN 0045- 7825, Vol 324, pp 413-437, doi.org/10.1016/j.cma.2017.06.019, 2017.
2. Milosevic Miljan, **Simic Vladimir DR**, Milicevic Bogdan, Koay E.J, Ferrari Mauro, Ziemys Arturas, Kojic M, Correction function for accuracy improvement of the Composite Smeared Finite Element for diffusive transport in biological tissue systems. Computer Methods in Applied Mechanics and Engineering, ISSN 0045- 7825, Vol 338, pp 97-116, doi.org/10.1016/j.cma.2018.04.012, 2018.
3. Ziemys Arturas, Yokoi Kenji, Kai Megumi, Liu Y.T., Kojic M**, Simic Vladimir DR**, Milosevic Miljan, Holder A., Ferrari Mauro, Progression-dependent transport heterogeneity of breast cancer liver metastases as a factor in therapeutic resistance, Journal of Controlled Release, ISSN 0168-3659, Vol 291, pp 99-105, doi.org/10.1016/j.jconrel.2018.10.014, 2018.

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1. Milosevic Miljan, Stojanovic Dusica B, **Simic Vladimir DR**, Milicevic Bogdan, Radisavljevic Andjela, Uskokovic Petar S, Kojic Milos, A Computational Model for Drug Release from PLGA Implant, Materials, ISSN 1996-1944, Vol. 11, No. 12 pp 1-17, doi.org/10.3390/ma11122416, 2018.
2. Milos Kojic, Miljan Milosevic, **Simic Vladimir DR**, Bogdan Milicevic, Vladimir Geroski, Sara Nizzero, Arturas Ziemys, Nenad Filipovic, Mauro Ferrari, Smeared Multiscale Finite Element Models for Mass Transport and Electrophysiology Coupled to Muscle Mechanics, Frontiers in Bioengineering and Biotechnology, ISSN 2296-4185, Vol. 7, No. 381, pp. 1-16, doi.org/10.3389/fbioe.2019.00381, 2019.

3. Milosevic Miljan, Stojanovic Dusica B, **Simic Vladimir DR**, Grkovic Mirjana, Bjelovic Milos, Uskokovic Petar S, Kojic M. Preparation and modeling of three-layered PCL/PLGA/PCL fibrous scaffolds for prolonged drug release, Sci Rep Vol 10, 11126, ISSN 2045-2322, doi.org/10.1038/s41598-020-68117-9, 2020.
4. Ziemys, A., Simic, V., Milosevic, M., Kojic, M., Liu, Y.T., Yokoi, K. Attenuated Microcirculation in Small Metastatic Tumors in Murine Liver. Pharmaceutics 2021, Vol 13, 703, doi.org/10.3390/pharmaceutics13050703.
5. Nikolic A., Topalovic M., Simic, V., Filipovic N., Turbulent finite element model applied for blood flow calculation in arterial bifurcation. Computer Methods and Programs in Biomedicine 2021, Vol 209, ISSN 0169-2607, doi.org/10.1016/j.cmpb.2021.106328
6.Filipovic N, Sustersic T, Milosevic M, Milicevic B, **Simic V**, Prodanovic M, Mijailovic S and Kojic M, SILICOFCM platform, multiscale modeling of left ventricle from echocardiographic images and drug influence for cardiomyopathy disease, Computer Methods and Programs in Biomedicine 2022, Vol 227, ISSN 0169-2607, doi.org/10.1016/j.cmpb.2022.107194.

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2. Kojic Milos R, Milosevic Miljan, **Simic Vladimir DR**, Geroski Vladimir N, Ziemys Arturas, Filipovic Nenad D, Ferrari Mauro, Smeared multiscale finite element model for electrophysiology and ionic transport in biological tissue, Computers in Biology and Medicine, ISSN0010-4825,Vol.108,pp.288-304,doi.org/10.1016/j.compbiomed.2019.03.023, 2019.
3. Santagiuliana Raffaella, Milosevic Miljan, Milicevic Bogdan, Sciume Giuseppe, **Simic Vladimir DR**, Ziemys Arturas, Kojic Milos R, Schrefler Bernhard A, Coupling tumor growth and bio distribution models, Biomedical Microdevices, ISSN: 1387-2176, Vol. 21, No. 2, pp.-, doi: 10.1007/s10544-019-0368-y., 2019.

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1. Filipovic, N., Saveljic, I., Sustersic, T., Milosevic, M., Milicevic, B., **Simic, V.**, Ivanovic, M., Kojic, M. In Silico Clinical Trials for Cardiovascular Disease. J. Vis. Exp. (183), e63573, doi:10.3791/63573, 2022.
2. **Simic V**, Milosevic M, Milicevic V, Filipovic N, Kojic M. A novel composite smeared finite element for mechanics (CSFEM): Some applications. Technol Health Care. 2022 Oct 14. doi: 10.3233/THC-220414. Epub ahead of print. PMID: 36314177.

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1. M. Kojic, **V. Simic**, M. Milosevic, Incremental Finite Element Formulation for Large Strains Based on The Nodal Force Increments, JSSCM, ISSN 1820-6530, Vol. 11, No. 1, 10.24874/jsscm2017.11.01.10, pp. 97-109, 2017.
2. M. Kojic, **V. Simic**, M. Milosevic, A radial 1D Finite Element for Drug Release from Drug Loaded Nanofibers, JSSCM, ISSN 1820-6530 Vol. 11, No. 1, 10.24874/jsscm2017.11.01.08, pp. 82-93, 2017.
3. M. Kojic, M. Milosevic, **V. Simic**, E. J. Koay, N. Kojic, A. Ziemys, M. Ferrari, Extension of the Composite Smeared Finite Element (CSFE) to Include Lymphatic System in Modeling Mass Transport in Capillary Systems and Biological Tissue, JSSCM, ISSN 1820-6530, Vol. 11, No. 2, 10.24874/jsscm2017.11.02.09, pp. 108-119, 2017.

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2. Milosevic M., **Simic V.**, Kojic M., Numerical modeling of drug delivery in organs: from CT scans to FE model, 2nd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures (FABULOUS), Belgrade, Serbia, October 24-25, 2016, ISBN 978-3-319-74935-8, pp. 87-92, Pervasive Computing Paradigms for Mental Health, doi.org/10.1007/978-3-319-74935-8_12.
3. Kojic M, Milosevic M, **Simic V**, Ziemys A, Ferrari M, Coupling fluid

and solid domains in modeling drug transport within tumor, COUPLED PROBLEMS 2015 - Proceedings of the 6th International Conference on Coupled Problems in Science and Engineering, Venice, Italy, May 20-25, 2015, ISBN: 9788494392832, pp. 583-592, International Center for Numerical Methods in Engineering.
4. Mauro Ferrari, Milos Kojic, Miljan Milosevic, **Vladimir Simic**, Arturas Ziemys, Multiscale models for drug transport in tumors and biological tissue, ECCOMAS 2nd International Conference on Multi- scale Computational Methods for Solids and Fluids, Sarajevo, Bosnia and Herzegovina, 10–12 June, 2015, University of Sarajevo, Faculty of Civil Engineering, ISBN 9783319279947.
5. **Vladimir Simic**, Jessica Domitrovic, Miljan Milosevic, Bogdan Milicevic, Ashley Holder, Milos Kojic, Computational model for heat transfer coupled with fluid flow within peritoneal cavity, 1st International Conference on Chemo and Bioinformatics, Kragujevac, Serbia, 26-27th October, 2021, University of Kragujevac, Faculty of Engineering, ISBN 978-86-82172-00-0, pp. 271-274, doi:10.46793/ICCBI21.271S.
6. Miljan Milosevic, Nicola Di Trani, **Vladimir Simic,** Alessandro Grattoni, Milos Kojic, COMPUTATIONAL MODELING OF INTRAOCULAR DRUG TRANSPORT, 1st International Conference on Chemo and Bioinformatics, Kragujevac, Serbia, 26-27th October, 2021, University of Kragujevac, Faculty of Engineering, ISBN 978-86-82172-00-0, pp 68-71, doi:10.46793/ICCBI21.068M.
7. Aleksandar Nikolic, Marko Topalovic, Milan Blagojevic, **Vladimir Simic,** BLOOD FLOW IN CORONARY ARTERY BIFURCATION CALCULATED BY TURBULENT FINITE ELEMENT MODEL, 1st International Conference on Chemo and Bioinformatics, Kragujevac, Serbia, 26-27th October, 2021, University of Kragujevac, Faculty of Engineering, ISBN 978-86-82172-00-0, pp 235-238, doi:10.46793/ICCBI21.235N
8. Miljan Milosevic, Bogdan Milicevic, **Vladimir Simic**, Vladimir Geroski, Nenad Filipovic, Milos Kojic, Computational model for simulation of left ventricle behaviour during heart beat, 21st International Conference on Bioinformatics and Bioengineering (BIBE), October 25-27, 2021, Kragujevac, Serbia, ISBN 978-1-6654-4261-9, doi: 10.1109/BIBE52308.2021.9635417.
9. Aleksandar Nikolic, Marko Topalovic, **Vladimir Simic**, Nenad Filipovic, Calculation of blood flow in carotid artery bifurcation by turbulent finite element method, 21st International Conference on Bioinformatics and Bioengineering (BIBE), October 25-27, 2021, Kragujevac, Serbia, ISBN 978-1-

6654-4261-9, DOI: 10.1109/BIBE52308.2021.9635360.
10. **Vladimir Simic**, Miljan Milosevic, Igor Saveljic, Bogdan Milicevic, Nenad Filipovic, Milos Kojic, 3D reconstruction and computational modeling of solid-fluid interaction in realistic heart model, 21st International Conference on Bioinformatics and Bioengineering (BIBE), October 25-27, 2021, Kragujevac, Serbia, ISBN 978-1-6654-4261-9, DOI: 10.1109/BIBE52308.2021.9635284.

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2. Miljan Milosevic, **Vladimir Simic**, Ananth Annapragada, Milos Kojic, "Modeling of convective-diffusive transport within mouse brain", 5th International Congress of Serbian Society of Mechanics, Serbian Society of Mechanics (SSM), Arandjelovac, Serbia, June 15-17, 2015.
3. Mauro Ferrari, Milos Kojic, Miljan Milosevic, **Vladimir Simic**, Rita Serda, Ananth Annapragada, Arturas Ziemys, A computational model for drug transport within tumors and large blood vessel networks, Houston, Texas, 5th Annual International Conference in Computational Surgery, Computational Surgery International Network, USA 19–21 January 2015.
4. Miljan Milosevic, Milos Kojic, **Vladimir Simic**, Dusica Stojanovic, Petar Uskokovic, NUMERICAL MODELING OF DIFFUSION IN POLY(LACTIC-CO-GLYCOLIC ACID) CONSISTED OF DRUG-LOADED EMULSION ELECTROSPUN NANOFIBERS, Crete Island, Greece, ECCOMAS Congress 2016, VII European Congress on Computational Methods in Applied Sciences and Engineering, 5–10 June 2016.
5. Milos Kojic, Miljan Milosevic, **Vladimir Simic**, Mauro Ferrari, Eugene J. Koay, Arturas Ziemys, A MODEL FOR DRUG TRANSPORT IN TUMOR, Crete Island, Greece, ECCOMAS Congress 2016, VII European Congress on Computational Methods in Applied Sciences and Engineering, 5–10 June 2016.
6. M. Kojic, M. Milosevic, **V. Simic**, E.J. Koay, A. Ziemys, M. Ferrari, On

transport and computational models for tissue and tumors, Bordeaux, France, 6th Annual International Conference on Computational Surgery, 25–26 May 2016.

7. Miljan Milošević, Miloš Kojic, **Vladimir Simić**, Accuracy of Smeared Finite Element Model Improved by a Field of Correction Factors, Kragujevac, Serbia, Book of Abstracts, ISBN 978-86-921243-0-3, 4th South- East European Conference on Computational Mechanics, 03-04 July 2017, pp 26-27.
8. Miloš Kojic, Miljan Milošević, **Vladimir Simić**, Nikola Kojic, Arturas Ziemys, Mauro Ferrari, Convection- Diffusion Transport Model Using Composite Smeared Finite Element, Kragujevac, Serbia, Book of Abstracts, ISBN 978-86-921243-0-3, 4th South- East European Conference on Computational Mechanics, 03-04 July 2017, page 27.
9. Miloš Kojić, Miljan Milošević, **Vladimir Simić**, „Convection-diffusion transport model using composite smeared finite element“, Tara, Serbia, Book of Abstracts, ISBN 978-86-909973-6-7, The 6th International Congress of Serbian Society of Mechanics, 19-21 June, 2017, page 162.
10. Miljan Milošević, Miloš Kojić, **Vladimir Simić**, Field of Correction Factors for Smeared Finite Element, Tara, Serbia, Book of Abstracts, ISBN 978-86-909973-6-7, The 6th International Congress of Serbian Society of Mechanics, 19-21 June, 2017, page 163.
11. **Vladimir Simić**, Miljan Milošević, Bogdan Milićević, Miloš Kojić, Application of multi-scale smeared finite element model for modeling of mass transport in capillary systems and biological tissue, Belgrade, Serbia, Book of Abstracts, ISSN 2334-6590, Vol 40, No. 1, Belgrade BioInformatics Conference, 18-22 June, 2018, page 93.
12. **Vladimir Simic**, Miljan Milosevic, Arturas Ziemys, Milos Kojic, Application of CSFE for drug delivery in liver model with tumor, Belgrade, Serbia, Proceedings of 8th International Conference on Computational Bioengineering (ICCB2019), ISBN: 978-86-81037-75-1, 8th International Conference on Computational Bioengineering, 4-6 September 2019. pp 38-39.
13. Milos Kojic, Miljan Milosevic, Bogdan Milićević, **Vladimir Simic**, Heart mechanical model based on Holzapfel experiments, Belgrade, Serbia, Proceedings of 8th International Conference on Computational Bioengineering (ICCB2019), ISBN: 978-86-81037-75-1, 8th International Conference on Computational Bioengineering, 4-6

September 2019. pp 36-37.

14. Milos Kojic, Miljan Milosevic, **Vladimir Simic**, Bogdan Milicevic, Vladimir Geroski, Nenad Filipovic, Smeared finite element model of heart wall: electrophysiology coupled with muscle mechanics, Athens, Greece, 19th International Conference on Bioinformatics and Bioengineering (BIBE), IEEE Computer Society, 10.1109/BIBE.2019.00089, pp. 458-461, Oct 28-30, 2019.
15. Miljan Milosevic, Bogdan Milicevic, **Vladimir Simic**, Vladimir Geroski, Smiljana Djorovic, Milos Kojic, Nenad Filipovic, Application of electro-mechanical model for investigation of human heart behaviour, 8th European Medical and Biological Engineering Conference (EMBEC 2020), Portorož, Slovenia, 2020, 29 November − 3 December, pp. 58, ISBN 978-961-243-411-3
16. **Vladimir Simic**, Miljan Milosevic, Bogdan Milicevic, Vladimir Geroski, Milos Kojic, Nenad Filipovic, Application of smeared modeling concept and Holzapfel material model for investigation of human heart properties, 8th European Medical and Biological Engineering Conference (EMBEC 2020), Portorož, Slovenia, 2020, 29 November − 3 December, pp. 60, ISBN 978-961-243-411-3
17. Miljan Milosevic, Bogdan Milicevic, Vladimir Geroski, Vladimir Simic, Milos Kojic, APPLICATION OF THE SMEARED CONCEPT IN PATIENT-SPECIFIC HEART ELECTROPHYSIOLOGY MODELS, 14th World Congress in Computational Mechanics (WCCM) ECCOMAS Congress 2021 (Virtual Congress), International Centre for Numerical Methods in Engineering (CIMNE), ISBN: 978-84-121101-7-3, 11-15th January, 2021, Paris, France, pp. 1406
18. Milos Kojic, Vladimir Simic, Miljan Milosevic, SMEARED METHODOLOGY IN FINITE ELEMENT MODELING MECHANICAL PROBLEMS IN COMPOSITE MEDIA, 14th World Congress in Computational Mechanics (WCCM) ECCOMAS Congress 2021 (Virtual Congress), International Centre for Numerical Methods in Engineering (CIMNE), ISBN: 978-84-121101-7-3, 11-15th January, 2021, Paris, France, pp. 1413

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	1

1. M. Kojic, M. Milosevic, **V. Simic**, M. Ferrari, A 1D PIPE FINITE ELEMENT WITH RIGID AND DEFORMABLE WALLS, JSSCM, ISSN

1820-6530, Vol. 8, No. 2, pp. 38-53, 2014.

Scientific papers in national journals	**Sum 2**

1. Kojic Milos, **Simic Vladimir**, Milosevic Miljan, Composite smeared finite element- some ascpects of the formulation and accuracy, IPSI BgD Transactions on Advanced Research (TAR), ISSN 1820-4511, Vol. 13, No. 2, July 2017.
2. M. Anić, S. Savić, A. Milovanović, M. Milošević, B. Milićević, **V. Simić**, N. Filipović. Solution of fluid flow through left heart ventricle, Applied Engineering Letters: Journal of Engineering and Applied Sciences, Vol. 5 (2020) No. 4, Article 2 (p. 120-125), doi.org/10.18485/aeletters.2020.5.4.2

Proceedings of national scientific conferences	**Sum 11**

1. **Vladimir Simic**, Miljan Milosevic, Bogdan Milicevic, Milos Kojic, APPLICATION OF THE CSFE FINITE ELEMENT IN LIVER MODEL WITH TUMORS, Proceedings of 7th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Sremski Karlovci, Serbia, June 24-26, 2019, pp. 172-173.

2. Bogdan Milicevic, Raffaella Santagiuliana, Miljan Milosevic, **Vladimir Simic**, Bernhard Schrefler, Milos Kojic, COMPUTATIONAL PROCEDURE FOR COUPLING OF TUMOR GROWTH AND DRUG DISTRIBUTION MODEL, Proceedings of 7th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Sremski Karlovci, Serbia, June 24-26, 2019, pp. 164-166.

3. Miljan Milosevic, Dusica Stojanovic, **Vladimir Simic**, Bogdan Milicevic, Andjela Radisavljevic, Petar Uskokovic, Milos Kojic, NUMERICAL MODELS FOR DRUG RELEASE FROM DRUG-LOADED NANOFIBERS, Proceedings of 7th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Sremski Karlovci, Serbia, June 24-26, 2019, pp. 166-168.

4. Vladimir Geroski, Milos Kojic, Miljan Milosevic, **Vladimir Simic**,

Bogdan Milicevic, Nenad Filipovic, COUPLED ELECTROPHYSIOLOGICAL AND MECHANICAL FINITE ELEMENT MODEL OF THE HEART WALL, Proceedings of 7th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Sremski Karlovci, Serbia, June 24-26, 2019, pp. 180-182.

5. **Simic V.**, Milosevic M., Ziemys A., Kojic M., Application of Composite Smeared Finite Element Model in Drug Delivery Inside Organs. In: Filipovic N. (eds) Computational Bioengineering and Bioinformatics. ICCB 2019. Learning and Analytics in Intelligent Systems, vol 11. Springer, Cham, pp 44-52, 10.1007/978-3-030-43658-2_5 , ISBN: 978-3-030-43658-2, 2020.

6. **Vladimir Simic**, Miljan Milosevic, Bogdan Milicevic, Vladimir Geroski, Nenad Filipovic, Milos Kojic, FLUID-ELECTRO-MECHANICAL PARAMETRIC MODEL OF THE LEFT VENTRICLE, Proceedings of 8th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Kragujevac, Serbia, June 28-30, 2021, pp. 172-173.

7. Aleksandar Nikolic, **Vladimir Simic**, Miljan Milosevic, Arturas Ziemys, Kenji Yokoi, Milos Kojic, COMPUTATIONAL MODELING OF TUMOR CELL CIRCULATION IN CAPILLARY WITH PLATELETS, Proceedings of 8th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Kragujevac, Serbia, June 28-30, 2021, pp. 172-173.

8. Bogdan Milicevic, Miljan Milosevic, Vladimir Geroski, **Vladimir Simic**, Danijela Trifunovic, Nenad Filipovic, Milos Kojic, LEFT VENTRICLE MODEL GENERATED FROM ECHOCARDIOGRAPHIC DATA, Proceedings of 8th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Kragujevac, Serbia, June 28-30, 2021, pp. 172-173.

9. Aleksandar Nikolic, Marko Topalovic, **Vladimir Simic**, Milan Blagojevic, BLOOD FLOW IN ARTERIAL BIFURCATION CALCULATED BY TURBULENT FINITE ELEMENT MODEL, Proceedings of 8th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Kragujevac, Serbia, June 28-30, 2021,

pp. 172-173.

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11. Nenad Filipovic, Bogdan Milicevic, Miljan Milosevic, **Vladimir Simic**, Vladimir Geroski, Milos Kojic, BIOMECHANICS OF THE LEFT VENTRICLE AND IN SILICO DRUG TESTING, Proceedings of 8th International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-7-4, Kragujevac, Serbia, June 28-30, 2021, pp. 172-173.

CITATION OF SCIENTIFIC PAPERS

Citations number SCOPUS: 118 (self-citation excluded)

BRIEF DESCRIPTION OF RESEARCH IN THE PREVIOUS PERIOD

Development and application of smeared models in bioengineering, research and development of smeared methodology within diffusive and convective transport, as well as mechanical properties inside of large biological systems and development of multi-scale and computational finite element models for drug delivery within tumors.